Application No.: 10/708,805

Docket No.: 12264-US-PA

**AMENDMENT** 

In the Claims:

Please amend the claims as follows:

Claim 1 (currently amended) A system for accessing at least a first device and a

second device in parallel, the first device and the second device-being provided in parallel

for the system, the system comprising:

a single shared bus, coupled to the first device;

a bus isolator, coupled to the shared bus and the second device for isolating the

second device from the shared bus or connecting the second device to the shared bus; and

a control apparatus coupled to the shared bus so that the bus isolator isolates the

second device from the shared bus when the control apparatus needs to access the first

device and the bus isolator connects the second device with the shared bus when the control

apparatus needs to access the second device; and

a bus isolator control bus coupled between the bus isolator and the control apparatus,

so that the bus isolator is controlled by a signal issued by the control apparatus via the bus

isolator control bus to isolate the second device from the shared bus when the control

apparatus needs to access the first device and to connect the second device with the shared

bus when the control apparatus needs to access the second device.

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Claim 2 (currently amended) The system of claim 1, wherein the control apparatus

further comprises:

a bus exchanger, coupled to the single-shared bus for switching the authority for the

single shared bus between the first device and the second device; and

a bus arbitrator, coupled to the bus exchanger so that the bus arbitrator controls the

bus exchanger to connect the single shared bus with a circuit internally linked to the first

device when the control apparatus needs to access the first device and the bus arbitrator

controls the bus exchanger to connect the single-shared bus with a circuit internally linked

to the second device when the control apparatus needs to access the second device.

Claim 3 (currently amended) The system of claim 2, wherein a pre-defined isolation

period must pass before the bus exchanger is permitted to switch the device for authority for

the single-shared bus.

Claim 4 (original) The system of claim 1, wherein the second device comprises a

memory card compatible device.

Claim 5 (original) The system of claim 4, wherein the memory card compatible

device is either a memory card or a card reader.

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Claim 6 (original) The system of claim 1, wherein the first device comprises a

memory device.

Claim 7 (currently amended) A control apparatus for accessing a plurality of devices

in parallel through a single shared bus, wherein the control apparatus connects to a first

device through [[a]] the shared bus and the control apparatus also connects to a second

device through the shared bus and a bus isolator, and the control apparatus also connects to

the bus isolator through a bus isolator control bus for issuing a signal via the bus isolator

control bus to control the bus isolator, the first device and the second device being accessed

in parallel by the control apparatus, the control apparatus comprising:

a bus exchanger, coupled to the shared bus for switching the authority of device for

the shared bus; and

a bus arbitrator coupled to the bus exchanger such that the bus arbitrator controls the

bus exchanger to connect with a circuit internally linked to the first device and to activate

the bus isolator to isolate the second device from the shared bus when the control apparatus

needs to access the first device and the bus arbitrator controls the bus exchanger to connect

with a circuit internally linked related to the second device when the control apparatus

needs to access the first device.

Claim 8 (original) The control apparatus of claim 7, wherein the bus exchanger is

set to wait for the passage of a pre-defined isolation period lasting from the end of

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accessing the first device to the start of accessing the second device before switching the

control of the shared bus from the first device to the second device.

Claim 9 (original) The control apparatus of claim 7, wherein the second device

comprises a memory compatible device.

Claim 10 (original) The control apparatus of claim 7, wherein the memory

compatible device is either a memory card or a card reader.

Claim 11 (original) The control apparatus of claim 7, wherein the first device

comprises a memory unit.

Claim 12 (currently amended) A system using a single shared bus for accessing a

plurality of devices in parallel, a memory unit coupled to the shared bus and a memory card

compatible device, comprising:

a memory unit;

a memory card compatible device;

a shared bus, coupled to the memory unit; and

a bus isolator, coupled to the shared bus and the memory card compatible device;

a control apparatus coupled to the shared bus such that the control apparatus

controls the shared bus to connect with a circuit internally linked to a first device when the

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control apparatus needs to access the first device and the control apparatus controls the

shared bus to connect with a circuit internally linked to a second device when the control

apparatus needs to access the second device; and

a bus isolator control bus coupled between the bus isolator and the control apparatus,

so that the bus isolator is controlled by a signal issued by the control apparatus via the bus

isolator control bus to isolate the memory card compatible device from the shared bus when

the control apparatus needs to access the memory unit and to connect the memory card

compatible device with the shared bus when the control apparatus needs to access the

memory card compatible device.

Claim 13 (original) The system of claim 12, wherein a pre-defined isolation period

must pass before the control apparatus is permitted to access the second device through the

shared bus.

Claim 14 (original) The system of claim 12, wherein the memory card compatible

device is either a memory card or a card reader.

Claim 15 (original) The system of claim 12, wherein the memory unit comprises

read-only memory.

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Claim 16 (currently amended) A system using a single shared bus for parallel

accessing a plurality of devices a first device coupled to the shared bus and a second device,

comprising:

a first-device;

a second device;

a shared bus, coupled to the first device;

a bus isolator, coupled to the shared bus and the second bus for isolating the second

device from the shared bus or connecting the second device to the shared bus; and

a control apparatus coupled to the shared bus so that the bus isolator isolates the

second device from the shared bus when the control apparatus needs to access the first

device and the bus isolator connects the second device with the shared bus when the control

apparatus needs to access the second device, wherein the bus isolator is controlled-by-the

control apparatus to isolate the first device and the second device from the shared bus in

consideration of signaling demand for data transmission to prevent any data error resulting

from a mutual interference of the signal transmission between the first device and the

second device, wherein the first device and the second device are connected in parallel to

the apparatus; and

a bus isolator control bus transmitting a signal from the control apparatus to the bus

isolator for controlling the bus isolator for isolating the second device from the shared bus

when the control apparatus needs to access the first device and connecting the second

device with the shared bus when the control apparatus needs to access the second device,

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wherein the bus isolator is controlled by the control apparatus to isolate the first device and

the second device from the shared bus in consideration of signaling demand for data

transmission to prevent any data error resulting from a mutual interference of the signal

transmission between the first device and the second device.

Claim 17 (previously presented) The system of claim 16, wherein a triggering signal

is transmitted to the bus isolator for performing the isolation.

Claim 18 (previously presented) The system of claim 16, wherein if the signaling

demand for data transmission on the shared bus for the second device is lower than the first

device, the bus isolator connects the second device with the shared bus immediately when

the control apparatus carriers out data transmission to the second deice.

Claim 19 (previously presented) The system of claim 16, wherein a pre-defined

isolation period is expired when the bus exchanger is permitted to switch the first device or

the second device for authority for the shared bus.

Claim 20 (previously presented) The system of claim 1 further comprising a first

bus connecting the control apparatus and the first device for controlling the first device and

a second bus connecting the control apparatus and the second device for controlling the

second device.

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